



File No.: 10326-54US-1 KPM/en

Montreal, Canada  
November 26, 2001

IN THE UNITED STATES PATENT AND TRADEMARKS OFFICE

In re Application of

Xujun HUA et al

For: A Method for Reducing Alkaline Darkening of Mechanical  
Pulp Containing a Calcium Carbonate Filler

S.N.: Unknown (Continuation of USSN 09/417,085, filed Oct. 13,  
1999)

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U.S. Patent and Trademark Office  
Washington, D.C. 20231  
U.S.A.

**PRELIMINARY AMENDMENT**

Sir:

Please amend the application as follows. prior to calculating the official fees.

IN THE SPECIFICATION:

The first paragraph at page 2 is amended to show the continuation status as well as the priority claim under 35 USC 119(e).

There is attached a sheet containing a clean first paragraph of the specification to replace the paragraph at page 1, lines 2 to 3.

Additionally, there is attached here a sheet annotated to show the changes made in the first paragraph at page 1.

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The Assistant Commissioner for Patents

IN THE CLAIMS

Please rewrite claim 1 as follows:

1. (Amended) A method of inhibiting alkaline darkening of a mechanical pulp in the presence of a calcium carbonate filler comprising:

providing an aqueous suspension of a mechanical pulp for producing paper, and

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp, and a sulphite to inhibit alkaline darkening of said pulp in said suspension arising from the calcium carbonate filler in the suspension.

Please insert in the application claims 20 to 25 hereinafter.

20. (New) A method of inhibiting darkening of a mechanical pulp in the presence of calcium carbonate comprising:

providing an aqueous suspension of a mechanical pulp for producing paper,

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp and a sulphite,

maintaining a pH of 7 to 9 in the resulting suspension containing said pulp, filler and sulphite, and

chemically reacting said sulphite with said pulp to inhibit darkening of said pulp by said calcium carbonate.

The Assistant Commissioner for Patents

21. (New) A method according to claim 20, wherein said sulphite is selected from alkali metal sulphites, alkali metal bisulphites and alkali metal metabisulphites.

22. (New) A method according to claim 20, wherein said sulphite is selected from sodium sulphite, sodium bisulphite and sodium metabisulphite.

23. (New) A method of producing paper from a mechanical pulp and calcium carbonate filler comprising:

providing an aqueous suspension of a mechanical pulp for producing paper,

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp, and a sulphite,

maintaining a pH of 6.5 to 9 in the resulting suspension containing said pulp filler and sulphite,

chemically reacting said sulphite with said pulp to inhibit darkening of said pulp by said calcium carbonate filler, and

forming said suspension into paper.

24 (New) A method according to claim 23, wherein said sulphite is selected from alkali metal sulphites, alkali metal bisulphites and alkali metal metabisulphite.

25. (New) A method according to claim 23, wherein said sulphite is selected from sodium sulphite, sodium bisulphite and sodium metabisulphite.

The Assistant Commissioner for Patents

Please cancel claims 13 to 19 without prejudice.

There is attached an annotated copy of claim 1 as amended with new claims 20 to 25 and a clean copy of claim 1 as amended with new claims 20 to 25.

REMARKS

Claims 1 to 12 and 20 to 25 are in the case.

The claims have been amended so that they are in the same form as in the parent application at the time of the advisory action of October 16, 2001.

The amendment which Applicant made in the parent application in claim 1 was indicated as raising new issues.

It is requested that claims 1 to 12 and 20 to 25 now be considered.

It is requested that the submissions made with respect to the prior art references in the submissions in response to the Office Action of February 20, 2001 and July 30, 2001 in the parent application be incorporated herein by reference and that particular consideration be given to the submission in response to the Office Action of July 30, 2001 in the parent application, with respect to how the claims distinguish over the cited art.

The first paragraph of the specification has been amended to show the continuation status.

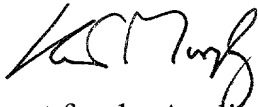
The Assistant Commissioner for Patents

The application is believed to be in condition for allowance and early and favorable action would be appreciated.

Respectfully,

X. HUA et al

By:

A handwritten signature in black ink, appearing to read "K. Murphy", written over a horizontal line.

Agent for the Applicant  
Kevin P. Murphy  
Reg. No. 26,674  
Direct Dial: (514) 847-4293

Date: November 26, 2001

FOOTNOTES



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AMENDED CLAIMS FIRST PARAGRAPH OF PAGE 1

### **CROSS REFERENCE TO RELATED APPLICATION**

This Application is a Continuation of USSN 09/417,085 filed October 13, 1999 and claims priority under 35 U.S.C. 119(e) from U.S. Provisional Application S.N. 60/105,951, filed October 28, 1998.

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ANNOTATED FIRST PARAGRAPH OF PAGE 1

### **CROSS REFERENCE TO RELATED APPLICATION**

This Application is a Continuation of USSN 09/417,085 filed October 13, 1999 and claims priority under 35 U.S.C. 119(e) from U.S. Provisional Application S.N. 60/105,951, filed October 28, 1998.

### **BACKGROUND OF THE INVENTION**

Patent No. 6,010,000

Clean copy

1. (Amended) A method of inhibiting alkaline darkening of a mechanical pulp in the presence of a calcium carbonate filler comprising:

providing an aqueous suspension of a mechanical pulp for producing paper, and

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp, and a sulphite to inhibit alkaline darkening of said pulp in said suspension arising from the calcium carbonate filler in the suspension.

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Annotated Copy

1. (Amended) A method of inhibiting alkaline darkening of a mechanical pulp in the presence of a calcium carbonate filler comprising:

providing an aqueous suspension of a mechanical pulp for producing paper, and

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp, and a sulphite to inhibit alkaline darkening of said pulp in said suspension arising from the calcium carbonate filler in the suspension.

FOOTNOTES

## NEW CLAIMS

20. (New) A method of inhibiting darkening of a mechanical pulp in the presence of calcium carbonate comprising:

providing an aqueous suspension of a mechanical pulp for producing paper,

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp and a sulphite,

maintaining a pH of 7 to 9 in the resulting suspension containing said pulp, filler and sulphite, and

chemically reacting said sulphite with said pulp to inhibit darkening of said pulp by said calcium carbonate.

21. (New) A method according to claim 20, wherein said sulphite is selected from alkali metal sulphites, alkali metal bisulphites and alkali metal metabisulphites.

22. (New) A method according to claim 20, wherein said sulphite is selected from sodium sulphite, sodium bisulphite and sodium metabisulphite.

23. (New) A method of producing paper from a mechanical pulp and calcium carbonate filler comprising:

providing an aqueous suspension of a mechanical pulp for producing paper,

incorporating in said suspension a calcium carbonate filler for producing paper with the pulp, and a sulphite,

maintaining a pH of 6.5 to 9 in the resulting suspension containing said pulp filler and sulphite,

chemically reacting said sulphite with said pulp to inhibit darkening of said pulp by said calcium carbonate filler, and

forming said suspension into paper.

24 (New) A method according to claim 23, wherein said sulphite is selected from alkali metal sulphites, alkali metal bisulphites and alkali metal metabisulphite.

25. (New) A method according to claim 23, wherein said sulphite is selected from sodium sulphite, sodium bisulphite and sodium metabisulphite.

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